NOTES ON A COLLECTION OF

HETEROPTERA

TAKEN IN WINTER IN THE VICINITY OF LOS ANGELES, CALIFORNIA

BY

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From the Transactions of The American Entomological Society, LX, 1+16

Issued

No. 982

JAN 3 1 1934

\$0.

This is a separatum from the TRANSACTIONS, and is not a reprint. It bears the original pagination and plate numbers, and was placed on sale at the price quoted and library copies mailed at Philadelphia on the above date of issue.

TRANSACTIONS

OF THE

AMERICAN ENTOMOLOGICAL SOCIETY

VOLUME LX

NOTES ON A COLLECTION OF HETEROPTERA TAKEN IN WINTER IN THE VICINITY OF LOS ANGELES, CALIFORNIA

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In the winter of 1927–1928 I spent three and a half months in Los Angeles, California. While there I collected insects, mainly Coleoptera and Heteroptera, when opportunity offered. The collecting was done mostly in Griffith, Elysian and Hancock Parks, Los Angeles. Several day trips were made to other near-by stations and a longer one, with a number of scientists from the Experiment Station at Riverside, to the Salton Sea depression southeast of Indio. As the only extended list of the Heteroptera of Southern California which has come to my notice is that of Mr. E. P. Van Duzee entitled "A Preliminary List of the Hemiptera of San Diego Co., California," it will perhaps be of interest to future collectors in the region mentioned to have access to a list of the species of Heteroptera taken in and about Los Angeles between November 25 and March 15.

In the list which follows the number in parenthesis preceding the scientific name is the serial number of the species in the Van Duzee "Catalogue of the Hemiptera of America North of

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¹ Trans. San Diego Soc. Nat. Hist., 11., pp. 1-57.

Mexico." Where the species has been described since the Van Duzee Catalogue was issued, a citation to the place of original description is given in a footnote. My thanks are due Mr. Van Duzee and Mr. H. G. Barber for aid rendered in the identification of a number of the species. A series of specimens from the material upon which this paper is based is deposited in the collection of The American Entomological Society.

1 (11). Stethaulax marmoratus (Say)

Three specimens taken at Griffith Park, November 28 and February 21, by beating oak and pine foliage. While this is recognized by Van Duzee as Say's species it differs in several important characters from the eastern form,² and may represent the *S. simulans* of Uhler (1876, 272), described from California, which Van Duzee makes a synonym of marmoratus.

2 (13). Sphyrocoris punctellus (Stal)

One male was swept from wild sunflower, February 17, near the Hot Springs, four miles north of San Jacinto. Recorded from California only from San Diego County but found in numbers by Van Duzee on wild cotton on Cerallvo Island, Gulf of California.

3 (18). Homæmus variegatus Van Duzee

One specimen beaten from oak November 28 at Griffith Park. Described from San Diego and recorded only from there.

4 (36). Corimelæna extensa Uhler

A single example was beaten from chaparral, February 1st on a slope at the same park. It is a species of wide range.

5 (45). Macroporus repetitus Uhler

Two were taken at Griffith Park, December 9 to March 8. Described from San Francisco. Recorded also from San Diego County and San Gabriel, California.

6 (48). Aethus testudinatus (Uhler)

One was found, January 13, beneath a clump of dead weeds just above high tide on the beach at Santa Monica. Originally described from California but no definite station record has since been made from that State.

² See footnote page 45 of my "Heteroptera of Eastern North America."

7 (56). Pangæus discrepans Uhler

One, taken February 26, from beneath a stone on the edge of a stream near Sunland. Described from San Diego. Ranges as far east as Indiana.

8 (). Pangæus californicus Blatchley³

The type, a female, was taken January 10, from beneath a stone in a small, semi-desert area near Sunland, Los Angeles County. Other unnamed specimens are in the collection of the California Academy of Sciences, labelled "San Diego, Cal., IV--8, and Cold Water Canyon, Los Angeles Co., Cal., X-4." This species is most closely allied to *P. discrepans*, from which it differs in its larger size (9.3 to 10 as against 6.5 to 8 mms.); lack of punctures or distinct groove behind apex of pronotum, much fewer and more regularly placed bristles on cheeks and along side margins of pronotum and elytra, smoother disks of pronotum and corium, etc.

9 (87). Brochymena tenebrosa Walker

Two were beaten, February 18, from the foliage of a creosote bush in the old bed of the Salton Sea, about 15 miles southeast of Indio.

10 (). Brochymena sulcata Van Duzee⁴

One beaten from a pepper tree, December 6, in Hancock Park.

11 (109). Chlorochroa sayi Stal

Found frequently, December 1 to March, hibernating beneath piles of weeds. One was beaten from juniper February 11. Varies in general color from pale brown to bright green. Readily known from its close allies by the three small ivory-white spots on the base of scutellum.

12 (122). Euschistus conspersus Uhler

This is a rather common bug about Los Angeles in winter. Adults were beaten from the flowers of shrubs on February 21 and March 1, and nymphs were noted beneath piles of weeds on numerous occasions. It occurs throughout the State and it and *E. crenator* (Fabr.) appear to be the only two of the 18 known North American species of the genus, recorded from California.

³ Entomological News, 1929, p. 74.

⁴ Proc. Cal. Acad. Sci., (4), viii, p. 276.

13 (148). Neottiglossa cavifrons Stal

A single example of this handsome little pentatomid was beaten from a flowering shrub at Griffith Park on February 21. It ranges east to southern Indiana, but is nowhere common, and in California has been definitely recorded only from Mt. Diablo Park, Cloverdale and Placerville.

14 (158). Thyanta custator Fabricius

This widely distributed bug was taken on numerous occasions during the winter, by sweeping grasses and weeds on vacant lots, beating flowering shrubs, etc.

15 (164). Thyanta punctiventris Van Duzee

Two examples of this small species were taken, December 22 and January 13; one from a bunch of dead grass near Hancock Park, the other from beneath weed debris at Santa Monica beach. It ranges east to Nebraska and North Dakota. No previous definite station record from California can be found.

16 (165). Thyanta brevis Van Duzee

A single example was beaten February 18 from a creosote bush at Salton Sea. Recorded from several localities in San Diego County and Lower California.

17 (172). Murgantia histrionica (Hahn)

This, the well known "harlequin cabbage bug," was the first and one of the most common pentatomids that I saw while at Los Angeles. It occurred in all stages during the winter on wild mustard and other cruciferous plants along the streets and in vacant lots. The specimens taken all differ from those of the eastern states in being larger and much darker, with a different pattern of the reddish and black colors, and the name *nigricans*⁵ Cockerell which Van Duzee relegates to synonymy, should probably be retained for it as a distinct color variety.

18 (227). Podisus maculiventris (Say)

This, the widely distributed "soldier bug," is apparently scarce about Los Angeles in winter. One specimen was beaten from juniper in Hancock Park on March 6.

19 (247). Leptoglossus occidentalis Heidemann

A single example of this western species was taken February 11

⁶ Bull. So. Cal. Acad. Sci., 11, 1903, p. 85.

by beating from the same clump of juniper. No previous definite station from the State can be found.

20 (). Chariesterus balli Fracker⁶

This species has heretofore been known only by two specimens from Cabazon, California, the type locality. A single example was taken February 17 from wild sunflower growing on a slope near the Hot Springs, four miles north of San Jacinto. Jacumba

21 (289). Margus inconspicuus (Herrich-Schaeffer) My Collection

This is another western species heretofore recorded only indefinitely from California. Two specimens were taken February 17 from the same clump of sunflowers near the Hot Springs.

22 (301). Anasa tristis (DeGeer)

This, the "common squash bug," was taken frequently at Hancock Park and Elmonte from beneath piles of weeds and other winter cover. It ranges throughout the United States.

23 (341). Aufeius impressicollis Stal

A rather common form, taken on several occasions at Griffith Park and Elmonte, by beating dead tumbleweed (*Amaranthus* sp.), and branches of oak and living apple and walnut trees. Ranges east to Indiana and Ohio.

24 (343). Corizus hyalinus (Fabricius)

Taken several times at Hancock and Griffith parks by beating juniper and from beneath piles of weeds.

25 (347). Corizus validus Uhler

A single example of this large western species was taken February 17 from the clump of sunflowers at Hot Springs.

26 (348). Corizus lateralis (Say)

One was swept from tall grasses in a slough near the club house at Griffith Park. Judging from the few records it is apparently scarce in California.

27 (352). Corizus indentatus Hambleton

A single specimen was taken February 26 from beneath bark of eucalyptus near Sunland.

⁶ Ann. Ent. Soc. Amer., x11, 1919, p. 229.

28 (354). Corizus parvicornis Signoret

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This little hairy species was taken in numbers on several occasions by sifting weed debris at Hancock Park, Santa Monica Beach and Elmonte. No definite station from the State is on record.

29 (). Aradus depictus Van Duzee⁷

A single male was taken February 7 from beneath bark of a shrub at Griffith Park. It has been previously known only from the two type examples, one from Niles Canyon, Alameda County, the other from the hills near Claremont.

30 (406). Mezira mœsta Stal

One sifted, March 8, from the debris of a wood rat's nest at Griffith Park. Known also from several localities about San Francisco.

31 (419). Neides muticus (Say)

Taken on several occasions from beneath logs at Elysian and Griffith Parks. Occurs throughout the United States.

32 (426). Acanthophysa echinata Uhler

A single example of this little bristly stilt-bug was beaten, February 1, from a clump of dead vines at Griffith Park. It was originally described from the Argus Mts., Death Valley, and from near Los Angeles and has since been recorded from several other California stations. Of it Uhler says: "This most remarkable insect might perhaps be confounded with the prickly seed vessel of some of the sand ticks or beggars lice which grow in sandy places."

33 (437). Lygæus kalmii Stal

This is a common bug about Los Angeles in winter. On sunny days it occurs on the foliage of weeds and juniper. At other times it is found beneath piles of grass or rubbish. Ranges almost throughout the United States.

34 (452). Lygæus bicrucis Say

Taken in Elysian Park on several occasions on flowers of Compositae, and at Sunland, February 26, beneath stones. It is also a species of wide but more southern distribution than *kalmii*.

⁷ Proc. Cal. Acad. Sci., (4), v11, 1917, p. 253.

35 (462). Ortholomus scolopax (Say)

One specimen beaten, March 1, from sage-brush on hillside at Elysian Park. Recorded from San Diego and San Mateo counties as *O. longiceps* Stal, a synonym. Occurs throughout the United States.

36 (463). Ortholomus nevadensis Baker

One was beaten from wild sun-flower at Hot Springs. Recorded from San Diego County and Nevada.

37 (464). Ortholomus arphnoides Baker

This is one of the most common winter bugs about Los Angeles, occurring in numbers on dead weeds in vacant lots and on chaparral on the foot hill-slopes. Taken also at Hot Springs. Recorded only from California.

38 (466). Nysius californicus Stal

But two specimens were taken, both at Elysian Park, one from sage-brush, the other from flowers of *Viburnum*. It is a common species in Florida and other southern states.

39 (470a). Nysius ericæ minutus Uhler

Very common on sage-brush on the foot-hill slopes at Elysian and Griffith parks; also swept frequently from green herbage on vacant lots of the city. It is much smaller than typical *ericae* (Schill.) of the eastern states, and will probably prove to be a distinct species.

40 (472). Nysius strigosus Uhler

Taken from sage-brush with the preceding, also at Hot Springs and in the bed of the old Salton Sea near Indio. Described from San Julio, Lower California. Ranges east to Florida.

41 (478). Ischnorrhynchus franciscanus (Stal)

But three specimens were taken, all at Griffith Park by beating clumps of dead vines. Van Duzee records it as common in summer on chaparral in San Diego County.

42 (498). Geocoris punctipes (Say)

Frequent beneath clumps of dead weeds in vacant lots; also at Santa Monica beach. Ranges east through the southern states to Maryland and New Jersey.

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43 (502). Geocoris uliginosus (Say)

One, December 3, from beneath a pile of weeds in Hancock Park.

44 (529). Heræus coquilletti Barber

A single specimen, February 28, from beneath a board near Hancock Park. Barber's types were from Stanford University, California and Texas. Recorded also as *H. nitens* VanD., a synonym, from Alpine and Leona Heights, California.

45 (568). Cnemodus sobrius Uhler

Frequent in November and February at Griffith Park beneath stones, bark of decaying wood and other cover. All specimens taken were of the brachypterous form. Described from Lower California. Not definitely recorded elsewhere.

46 (). Thylochromus nitidulus Barber

A single brachypterous specimen of this new genus and new species⁸ was taken at Griffith Park, March 8, by sifting the debris of the nest of a yellow wood-rat, *Neotoma intermedia gilva* Rhodes. The macropterous type and a number of brachypterous individuals were taken by Barber along the Arroyo Seco Canyon near Pasadena in March and April, 1928, and others at Griffith Park by sifting dead leaves. He records also a single specimen from Harbison Canyon, San Diego County.

47 (571). Ozophora depicturata Barber⁹

A half dozen specimens were taken from the same rat's nest on the same date. The type of Barber and a number of paratypes were taken at the same place. He also records it from several localities in Arizona, and states that: "It is rather closely related to O. *picturata* Uhl., but is relatively longer and with the corium differently marked; the lateral margins of the pronotum much less evidently expanded; the head longer in relation to its width across the eyes."

48 (). Plinthisus pallidus Barber

One, January 27, beaten from willow at Elysian Park. This minute yellowish species was described¹⁰ from Los Angeles and is not recorded elsewhere.

⁸ Bull. Brookl. Ent. Soc., XXIII, 1928, p. 264.

⁹ Bull. Brookl. Ent. Soc., XXIII, 1928, p. 266.

¹⁰ Proc. Ent. Soc. Wash., xx, 1918, p. 111.

49 (587). Peritrechus tristis Van Duzee

Taken on several occasions during the winter from beneath matted clumps of grass and by beating juniper in and near Hancock Park. Recorded from Alpine, California. Ranges north to Vancouver, British Columbia.

50 (592). Sphragisticus nebulosus (Fallen)

Two were beaten, December 28, from a dead tumble-weed (*Amaranthus*) near Elmonte. Ranges throughout the United States.

51 (597). Emblethis vicarius Horvath

One, December 6, at Hancock Park, another at Elmonte, December 28, both beneath clumps of weed debris. Also a species of very wide range.

52 (601). Eremocoris inquilinus Van Duzee

Twenty or more were sifted, March 8, from the big nest of the wood-rat in Griffith Park. Van Duzee's types were taken in May, near San Diego, from a similar nest. Not recorded elsewhere.

53 (603). Togodolentus wrighti (Van Duzee)

Three were taken, March 8, from the same rat's nest at Griffith Park. Described from San Diego as an *Eremocoris*. Barber founded for his T. genuinus,¹¹ a synonym of wrighti, the genus *Togodolentus*. His type of genuinus was from Los Angeles. Recorded heretofore only from the two type localities.

54 (613). Scolopostethus tropicus Distant

Taken on several occasions by sifting weed debris at Griffith and Hancock parts and Elmonte. Described from Guatemala. Recorded by Van Duzee from San Diego, Fosters and Grossmont.

55 (636). Piesma cinerea (Say)

This little lace bug was taken near Hancock Park on several occasions by beating dead *Amaranthus*, one of its host plants. It ranges across the continent.

¹¹ Journ. N. Y. Ent. Soc., xxvi, 1918, p. 64.

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56 (). Corythucha bullata Van Duzee

Beaten in numbers, March 10, from the purple flowers of a "mountain lilac," (*Ceanothus* sp.?) on the slopes of the Ojai valley. Described¹² from San Diego and Los Altos, California, and not recorded elsewhere.

57 (). Corythucha confraterna Gibson

One, January 23, by beating holly in Sycamore Park. Described¹³ from Los Angeles, Chico and Santa Barbara, California.

58 (648¾). Corythucha eriodictyonæ Osborn & Drake

One, November 29, by beating the foliage of sycamore in Griffith Park. Described from San Mateo County, California.

59 (). Empicoris rubromaculata (Blackburn)

On December 9, this little "thread-legged" bug was beaten by scores and in all stages from dead tumble-weed (*Amaranthus*) in a meadow, south of the picnic stand at Griffith Park. It was also taken from dead walnut brush at Elmonte. Originally described from Hawaii, it has been recorded from numerous stations in this country as far east as Indiana and Virginia. The *Ploiariodes californica* Banks (No. 699 of the Van D. Catalogue) is a synonym.

60 (). Empicoris orthoneuron McAtee & Malloch

This species, described¹⁴ from Monterey and Santa Cruz, California, was taken on a number of occasions, November 30– January 18, from piles of grass, weeds and brush in vacant lots near Hancock Park. Recorded heretofore only from the type localities.

61 (740). Triatoma protracta (Uhler)

One adult and numerous nymphs in various stages of this "cone-nose" were sifted, March 8, from the nest of the wood rat at Griffith Park. Van Duzee records it as common at San Diego in nests of the same rodent. Described from Santa Cruz and San Diego.

¹² Proc. Cal. Acad. Sci., v11, 1917, p. 258.

¹³ Trans. Amer. Ent. Soc., xLiv, 1918, p. 102.

¹⁴ Proc. U. S. Nat. Mus., LXVII, 1925, p. 18.

62 (750). Sirthenea carinata (Fabricius)

Two nymphs were taken in December, one on a sidewalk, the other beneath a board near Hancock Park. It is a species of wide range, but adults, for some reason, are very scarce.

63 (764). Apiomerus crassipes (Fabricius)

One nymph, presumably of this species, was taken from beneath debris at the base of a sycamore in Griffith Park.

64 (770). Zelus cervicalis Stal

A single example, February 26, was beaten from a shrub in an arroya near Sunland. It is a species of wide range but without definite station records from California.

65 (800). Sinea diadema (Fabricius)

One, December 3, swept from herbage in a vacant lot. Also a common species of wide range.

66 (808). Sinea rileyi Montandon

One, February 23, beaten from shrub oak in Griffith Park. The last three species are all doubtless common about Los Angeles in spring and summer.

67 (). Nabis edax Blatchley¹⁵

The male type was taken December 6 by sifting debris beneath a pile of matted grass in Hancock Park. It differs from all our other described species in its nearly uniform pale color, relative length of the very slender antennal segments, etc.

68 (843). Lyctocoris stalii (Reuter)

A single example was taken, January 3, by sifting debris from beneath a pile of grass near Hancock Park. There is no station record from California. It ranges east to New York.

69 (859). Anthocoris antevolens White

This was a common species on willow throughout the winter in all the parks.

70 (864). Orius insidiosus (Say)

On sunny days the typical form of this little bug and its color variety, O. tristicolor White, were both common on the flowers

¹⁵ Ent. News, xL, 1929, p. 75.

and herbage of various plants. Both have a wide range. The generic name, Orius Wolff, has priority over Triphleps Fieber.

71 (). Cardiastethus cavicollis species nova

Oblong-oval. Dark reddish-brown, the margins of pronotum and elytra slightly paler, cuneus fuscous-brown, membrane hyaline, transparent, antennae with first joint, basal half of second and all of fourth, yellow, remainder fuscous; legs yellow. Pronotum with median transverse groove deep, entire and with a longitudinal groove extending from its middle back to the deeply concave basal margin. Basal half of pronotum densely and deeply punctate, corium finely and sparsely so, each puncture of the latter bearing a very fine appressed hair. Length 2.5 mm.

Type.—Male; beaten, February 21, from leaves of a dead oak in Griffith Park.

Paratype.—Male; taken January 13, from beneath a bunch of weeds just above high water line at Santa Monica Beach.

Resembles C. assimilis (Reut.) but larger and with sculpture of pronotum very different.

72 (871). Dufouriellus ater (Dufour)

Taken on several occasions at Griffith Park and near Sunland from beneath the close fitting bark of dead willows and English walnut. It is a palæarctic species of wide distribution.

73 (926). Phytocoris canescens Reuter

Taken in numbers throughout the winter by beating sage brush on the foot hill slopes of both Elysian and Griffith parks. The brachypterous form was much the more common.

74 (945). Phytocoris ramosus Uhler

A single specimen was beaten February 18 from a creosote bush at the edge of the Salton Sea depression. Originally described from Cape St. Lucas, San Bernardino and Los Angeles.

75 (). Phytocoris calvus Van Duzee

One taken with the preceding; two from sage brush at Elysian Park. Described¹⁶ from a single male taken on Mt. Wilson near Los Angeles; not recorded elsewhere.

76 (). Phytocoris geniculatus Van Duzee

One, February 18, also from a creosote bush at the same locality. Several others were seen.

¹⁶ Proc. Cal. Acad. Sci., (4), 1x, 1920, p. 343.

77 (956). Phytocoris vanduzeei Reuter

Two specimens taken from creosote bush near the Salton Sea depression.

78 (). Phytocoris sp.?

Two, taken January 27, by beating sage brush on the hill slopes near Elysian Park.

79 (). Irbisia californica Van Duzee¹⁷

Very common in February and March, on grass and other herbs in the parks and vacant lots. Described from numerous stations in southern and central California.

80 (). Irbisia cuneo-maculata species nova

Regularly oval, subconvex. Above black, shining, thickly clothed with a fine, prostrate whitish pubescence; basal third of cuneus with a large oblique yellowish-white spot; membrane dusky translucent, the nervule and margins paler; legs and middle of under surface yellow; antennae dark brown, basal joint paler. Head between the eyes finely granulose-punctate; basal two-thirds of pronotum unevenly convex, densely rather coarsely rugosepunctate; clavus and corium more finely and closely punctate, each puncture bearing a single prostrate very fine hair. Length 4.2 mm.

Type.—Brachypterous female; beaten, February 26, from a white flowered shrub near Sunland. Smaller, more oval and more convex than our other described species and the only one with a large pale spot on cuneus.

81 (1024). Lygus apicalis Fieber

Two examples of this large green species were taken, January 27, and February 21, by sweeping flowers of "everlasting" (*Gnaphalium*) at Griffith Park. It is a cosmopolitan species ranging from New England to Florida, Texas and California, and usually breeds on the horse-weed, *Leptilon canadense* (L.).

v 82 (1027). Lygus sallei Stal

One was beaten, January 13, from a bunch of living prostrate weeds on the beach at Santa Monica. It was recorded by Van Duzee from San Diego and ranges east and north to Colorado.

¹⁷ Proc. Cal. Acad. Sci. (4), x1, 1921, p. 146.

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83 (1032). Lygus elisus Van Duzee

This insect, and its color variety *viridiscutus* Knight, were the most common Mirids noted during the winter. They were taken in numbers on various occasions by sweeping green herbage in the vacant lots of the city and at Elmonte.

84 (1038¼). Lygus nubilus Van Duzee

Taken in some numbers in February by beating willow and elderberry in Elysian and Griffith parks. Described from San Diego but known also as far north as Sunol, Alameda County.

85 (1087). Clivinema villosa Reuter

One beaten February 18, from a creosote bush on the edge of the Salton Sea depression. Known from Colorado and Arizona but not before recorded from California.

86 (1112). Engytatus geniculatus Reuter

Abundant in all stages, January 13, on and beneath a fleshy leaved prostrate herb growing just above high tide on beach at Santa Monica. Not before recorded from California, but mentioned by Uhler (1894, 274) as occurring at Comondu and Magdalena Island, Lower California. A smaller and paler form, taken with this on the beach at Santa Monica, is probably E. simplex (Reut.).

87 (1135). Tiryus punctulatus (Reuter)

One taken December 22, by beating a bunch of dead grass near Hancock Park. Not before recorded from the State, though specimens are at hand from Walnut Creek and Napa, California which were taken by R. L. Usinger.

88 (). Ceratocapsus proximus species nova

Oblong-oval, widest behind the middle. Pale brownishyellow, sparsely clothed with long, inclined yellowish-hairs; antennae with apical joint dusky. Pronotum trapezoidal, but slightly wider at base than long at middle, disk finely sparsely punctate, calli obvious but not prominent. Elytra reaching sixth dorsal, finely and thickly punctate, tips subtruncate, cuneus poorly differentiated, membrane scarcely evident. Antennae with first joint three-fourths as long as width of vertex, second three times the length of first, third two-fifths the length of second, fourth one-half as long as third. Length 2.3 mm. Type.—A brachypterous female; beaten, December 7, from dead amaranth in Hancock Park.

89 (). Hadronema uhleri Van Duzee

One example of this recently described¹⁸ species was beaten from sage brush on the hill slope at Elysian Park. Van Duzee's types were from Alpine, San Diego County. Not elsewhere recorded.

90 (116934). Orthotylus ferox Van Duzee

Beaten in some numbers, January 10, from elder and a shrubby Compositæ at Sunland; also February 17 from wild sunflower at Hot Springs. Described from San Diego County. Easily known by its pale green hue and numerous bristly black hairs of the upper surface.

91 (1173¹/₂). Orthotylus uniformis Van Duzee

Common, February 18, on sage brush along the border of Salton Sea depression. Described from near Lake Tahoe, California, Arizona and New York.

92 (1199¹/₂). Parthenicus picicollis Van Duzee

Three were taken and a number of others seen on the foliage of a creosote bush February 18 near the border of the Salton Sea; several others were taken in February at Sunland and Griffith Park by beating the foliage of shrubby Compositæ. Described from San Diego County; not recorded elsewhere.

93 (). Parthenicus ruber Van Duzee

Frequent, February 18, on creosote bush near Salton Sea. Very active, most of them flying from the beating umbrella and escaping capture. Described¹⁹ from Placer County, Sisson and Mt. Tamalpais.

94 (1242). Plagiognathus breviceps Reuter

Common in February and March on the foliage and blossoms of a white flowered shrub at Griffith Park. Recorded by Van Duzee as very common near San Diego.

¹⁸ Pan Pacific Entomologist, IV, 1928, p. 182.

¹⁹ Proc. Cal. Acad. Sci., v11, 1917, p. 276.

95 (). Plagiognathus sp.?

Several specimens taken in January and February from sage brush on the slope of hill at Elysian Park.

96 (1253). Europiella decolor (Uhler)

Frequent from January 18 to March 15, on foliage and flowers of shrubs on the slopes of the parks; also on willow and beneath bark. From the records it is apparently a common form in southern California.

97 (1272). Rhinocloa forticornis Reuter

Taken on several occasions in December by sweeping roadside herbage and from beneath bunches of grass. Recorded from San Diego but appears scarce in California, though common in the southern states farther east.

98 (). Psallus sp.?

One, March_8, from a white flowered shrub at Griffith Park.

4 99 (1283). Gerris remigis Say

Frequent and mating, January 23, in pools in Los Angeles River near Sycamore Park. Widely distributed in North America.

^k 100 (1307). Microvelia americana (Uhler)

Frequent with the preceding, but concealed among masses of water weed. It is also a species of wide distribution.

> 101 (1308). Macrovelia hornii Uhler

One adult and several nymphs were taken February 17 at Hot Springs, from beneath a board on the side of a ditch of running sulphur water; others in all stages, March 11, beneath cover in a runway near the reservoir at Elysian Park. Uhler's types were in part from California, but no previous definite station record from that State can be found.

102 (1404). Abedus dilatatus (Say)

Several nymphs were taken, February 17, from a pool at the foot of a water-fall near Hot Springs; an adult carrying numerous eggs on its back was found March 1, in the runway at Elysian Park. Originally described from Mexico. Recorded from near San Diego.

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